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**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**



Declaration  
Submitted  
With Initial  
Filing

OR



Declaration  
Submitted after Initial  
Filing (surcharge  
(37 CFR 1.16 (e))  
required)

Attorney Docket Number

First Named Inventor

David H. Shen

COMPLETE IF KNOWN

Application Number

base on 60/431,980

Filing Date

12/10/2002

Art Unit

Examiner Name

**I hereby declare that:**

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

DAVID H. SHEN, U.S. CITIZEN, 21037 Dorsey Way, Saratoga, CA 95070

A Radio Frequency Receiver Architecture with Tracking Image-Reject Polyphase Filtering

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. . Box 1450, Alexandria, VA 22313-1450.

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## DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☐ Customer Number:  OR ☒ Correspondence address below

Name

DAVID H. SHEN, IRF SEMICONDUCTOR, INC.

Address

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City

CUPERTINO

State

CA

ZIP

95014

Country

U.S.A.

Telephone

408-777-8090

Fax

408-777-8091

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR:

☐ A petition has been filed for this unsigned inventor

Given Name

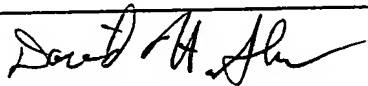
(first and middle [if any])

DAVID H.

Family Name

or Surname

SHEN

Inventor's  
Signature


Date

12/4/03

Residence: City

Saratoga

State

California

Country

U.S.A.

Citizenship

U.S.A.

Mailing Address  
21037 Dorsey Way

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CA

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95070

Country

U.S.A.

NAME OF SECOND INVENTOR:

☐ A petition has been filed for this unsigned inventor

Given Name

(first and middle [if any])

Family Name

or Surname

Inventor's  
Signature

Date

Residence: City

State

Country

Citizenship

Mailing Address

City

State

ZIP

Country

☐

Additional inventors or a legal representative are being named on the \_\_\_\_\_ supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.

## ASSIGNMENT OF APPLICATION

Docket Number (Optional)

Whereas, I, DAVID H. SHEN of 21037 DORSEY WAY, SARATOGA, CALIFORNIA 95070, U.S.A., hereafter referred to as applicant, have invented certain new and useful improvements in A RADIO FREQUENCY RECEIVER ARCHITECTURE WITH TRACKING IMAGE-REJECT POLYPHASE FILTERING

☐ for which an application for a United States Patent was filed on \_\_\_\_\_  
Application Number \_\_\_\_\_.

☒ for which an application for a United States Patent was executed on 12/4/03, and

Whereas, IRF SEMICONDUCTOR, INC. of ISLAND of GRAND CAYMAN, CAYMAN ISLANDS here referred to "assignee" whose mailing address is 6 RESULTS WAY, CUPERTINO, CALIFORNIA 95014, U.S.A is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of ZERO dollars (\$ 0.00), the receipt whereof is acknowledge, and other good and valuable consideration, I/We, the applicant(s), by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire rights, title and interest in and to any and all Patents which may be granted therefore in the United States. I/We hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 4 day of December, 20 03  
at 6 Results Way, Cupertino CA

David H. Shen  
Signature

State of California  
County of Santa Clara SS:

David H. Shen  
Printed Name/Registration No., if applicable

Before me personally appeared said David H. Shen

and acknowledged the foregoing instrument to be his free act and deed this 4<sup>th</sup>

day of December, 20 03

Seal

Rachel Murillo



Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, See below\*.

☐ Total of 1 forms are submitted.

This form offers a sample or suggested format for an assignment document. This sample form is not an OMB officially approved form.

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**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: DAVID H. SHEN

Application No./Patent No.: Based on Provisional Application No. 60/431,980 Filed/Issue Date: 12/10/2002/New Filing

Entitled: A RADIO FREQUENCY RECEIVER ARCHITECTURE WITH TRACKING IMAGE-REJECT POLYPHASE FILTERING

IRF SEMICONDUCTOR, INC., a CORPORATION

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or

2. ☐ an assignee of less than the entire right, title and interest.

The extent (by percentage) of its ownership interest is \_\_\_\_\_ %  
in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

12/14/2003

Date

408 777 8090

Telephone number

DAVID H. SHEN

Typed or printed name

David H. Shen

Signature

CFO

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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